

OBJECTIVES: Endocrine therapies in the treatment of breast cancer include tamoxifen, and aromatase inhibitors such as anastrozole. Anastrozole has demonstrated superior efficacy over tamoxifen in reducing disease recurrence in an EBC population and is associated with a number of important tolerability benefits over tamoxifen. This study aimed to examine the differences in preferences between anastrozole and tamoxifen as adjuvant treatment for breast cancer. **METHODS:** Eighty-five women aged 50–83 (mean 61) years were recruited from the Australian general public. Participants completed questions regarding experience with breast cancer and undertook a discrete choice task. The attributes used in the WTP scenarios included values for risk of breast cancer recurrence, hot flushes, vaginal abnormalities, and cardiovascular events (in favour of anastrozole) and musculoskeletal disorders and fracture (in favour of tamoxifen), and cost. The risk estimates were derived from clinical sources. **RESULTS:** A total of 74 subjects provided evaluable data. Eleven subjects were excluded because they were non-traders (3) or irrational in their choice task. The total WTP for anastrozole over tamoxifen was \$AUS673.40 per month (95% CI: 390.6–1044.0) for 3–5 years. This included a WTP of AUS\$267.00, AUS\$237.10 and AUS\$276.90 for the reduced risk associated with anastrozole for breast cancer recurrence, vaginal abnormalities and cardiovascular events, respectively. For the reduced risk of musculoskeletal disorders and fractures associated with tamoxifen, a negative WTP of –AUS\$67.80 was obtained. A negative point estimate was obtained for hot flushes (–AUS\$39.80). **CONCLUSIONS:** On average, subjects were willing to pay AUS\$673.40 per month for 3–5 years for the attributes of anastrozole over tamoxifen, placing higher value on reduced risk of recurrence, vaginal abnormalities and cardiovascular disease than hot flushes, musculoskeletal disorder and fracture.

PCN28

QUALITY OF LIFE AND SEXUALITY IN PATIENTS WITH RECTAL CANCER

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OBJECTIVES: Colorectal cancer is one of the most common forms of cancer in Europe and the USA. The aim of this study was to assess prospectively changes of quality of life after surgery for rectal cancer with a focus on sexuality and gender related differences. **METHODS:** Since 1998, the EORTC-QLQ-C-30 and a tumor specific ad-hoc module were prospectively administered to patients before surgery, at discharge, 3, 6, 12 and 24 months postoperatively. These data were combined with QoL data from a historical cohort of patients that underwent surgery between 1992 and 1997. Altogether, 819 patients with rectum and sigma carcinoma were included in the analysis, 541 of them provided QoL data for at least 1 time point. Comparisons were made between female and male patients. Due to skewed distributions, non-parametric statistical analyses were performed. A global alpha of $p < 0.05$ was considered significant. **RESULTS:** In total, 262 female and 279 male patients provided QoL data. Both groups were comparable in terms of age, tumor stage and surgical procedure. In men as well as women most QoL scores dropped significantly below baseline in the early postoperative period. From the third month onwards, global health, emotional and physical functioning improved. Female gender was associated with significantly worse global health and physical functioning and with higher scores on treatment strain and fatigue. Men reported more difficulties with sexuality. These problems

tended to remain. **CONCLUSIONS:** These findings confirm that QoL changes post surgery and is different between men and women. Women appear to be affected by impaired physical functioning and global health. Female gender is associated with significantly higher fatigue levels and increased strain values after surgery. In terms of impaired sexual enjoyment, men are put more under strain than woman. All differences between men and women remain stable in the course of time.

PCN29

PROSTATE CANCER SPECIFIC SYMPTOMS IN A GERMAN REFERENCE POPULATION

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OBJECTIVES: Prostate cancer is one of the most common forms of cancer in Europe and the USA. Predominant symptoms in these patients are erectile dysfunctions and urinary problems. Since decreases of these functions can be attributed to disease and treatment but also to age, we studied a German reference population measuring as well general QoL as prostate specific symptoms. Data from this study can be used as control group in studies with older men treated for prostate cancer. **METHODS:** In cooperation with a German health insurance company 3000 questionnaires were mailed to a randomly selected sample of men aged 45–75 years. General and disease targeted health related quality of life was measured using the EORTC QLQ-C30, a recently validated prostate specific module, the EQ-5D and the Patient Oriented Prostate Utility Score (PORPUS). A total of 1129 (37.6%) questionnaires were returned. We compared QoL data from this new reference population to QoL data from a historical cohort of 950 patients following prostatectomy or radio therapy, in which the same set of questionnaires was used. **RESULTS:** Mean age was 56.8 years. In terms of general QoL (QLQ-C30), the reference population showed similar QoL scores as prostatectomy patients but better scores than radio therapy patients. On the prostate specific module, the reference sample showed better QoL but a high extent of erectile dysfunction, urinary problems and psychic strain. More than 1/3 of the patients (39.0%) from the reference population reported some degree of urinary problems, 63.2% reported a decrease of sexual activity. **CONCLUSIONS:** Taking into account the sensitive topic of this study, a response rate of 37.6% is more than satisfying. Older men in our randomly selected, population based sample do not show perfect erectile and urinary function. These findings should be kept in mind when interpreting QoL data of prostate cancer patients.

PCN30

IMPROVED TOXICITY PROFILE OF PEMETREXED VS DOCETAXEL IN PREVIOUSLY TREATED NON-SMALL CELL LUNG CANCER PATIENTS TRANSLATES TO COST SAVINGS IN SPAIN

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OBJECTIVES: Cost of management of toxicity associated with chemotherapy can be considerable. We estimated costs of treating drug-related adverse events associated with pemetrexed or docetaxel as second-line therapy for non-small cell lung cancer (NSCLC). **METHODS:** Resource utilisation (RU) data (hospital admissions, concomitant medications, transfusions) were collected prospectively during a multinational, randomised phase III trial comparing pemetrexed 500 mg/m² and docetaxel 75 mg/m²,

both administered every 21 days. Clinic visits were estimated from grade four toxicities not requiring hospitalisation. Using the perspective of the national health care system, Spanish costs were applied to RU data from patients who received treatment (N = 541). Unit costs were obtained from published sources. Mean cost per patient was calculated. **RESULTS:** Baseline characteristics were well-balanced (72% male, 88% performance status 0/1, 75% Stage IV). Patients received a median of four cycles in both treatment arms. Survival was similar between arms (HR = 0.99), with a median of about eight months. Grade 3/4 neutropenia and neutropenic fever occurred more frequently with docetaxel (40% vs. 5%, 13% vs. 2%, respectively; $p < 0.001$). Most other grade 3/4 toxicities occurred at low rates ($\leq 5\%$) and were similar between arms. Patients receiving docetaxel were hospitalised more frequently and received more granulocyte colony-stimulating factors, erythropoietin, antibiotics and antifungals. Patients receiving docetaxel were more likely to incur extra clinic visits to manage grade four toxicity. Patients treated with pemetrexed received more transfusions. Total mean cost per patient was 309€ for pemetrexed and 1036€ for docetaxel. Hospitalisation and outpatient medications accounted for majority of costs (67% and 25% in the pemetrexed group, respectively, and 77% and 21% in the docetaxel group, respectively). **CONCLUSIONS:** Pemetrexed demonstrated similar efficacy to docetaxel in second-line treatment of NSCLC, but with a superior toxicity profile. The differences in toxicity are expected to translate to considerable cost savings to the Spanish health care system.

PCN31

EVALUATION OF PEMETREXED VERSUS DOCETAXEL IN THE SECOND-LINE TREATMENT OF ADVANCED NON-SMALL CELL LUNG CANCER: PATIENT PREFERENCE AND WILLINGNESS-TO-PAY WITH DISCRETE CHOICE CONJOINT ANALYSIS

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OBJECTIVES: Health-related quality of life assessments are increasingly used in clinical decision-making. A phase III trial of pemetrexed versus docetaxel in second-line therapy for advanced non-small cell lung cancer (NSCLC) showed similar efficacy; however, key safety benefits were reported with pemetrexed. Following a pilot study in the UK (UK), an expanded study in the UK and France was conducted to determine patient value associated with individual toxicity profiles. **METHODS:** A discrete choice conjoint analysis was used to quantify patient preference and willingness-to-pay for chemotherapy. A review of trial data, along with expert opinion, identified clinically meaningful toxicities that were statistically significantly different. Levels of risk of: febrile neutropenia (requiring hospitalisation) and nausea, neuropathy, arthralgia/myalgia, alopecia (all grades), were evaluated in the pilot. Following the pilot, arthralgia/myalgia was removed and a sample size of 70 pre-treated NSCLC patients per country was calculated. Patients considered unique, randomly generated sets of 10 pair-wise choice scenarios representing levels for toxicity attributes plus cost, designed to elicit trade-offs. Logistic regression analysis was applied to the stated scenario preferences against the individual attribute levels. **RESULTS:** In the expanded study, patients (N = 140) were predominantly male, mean age 61 years, and 60% Stage III, which is comparable to the pilot. Pemetrexed would be accepted in preference to docetaxel at zero cost, with a probability of 0.81 in the UK and

0.90 in France. The probability of choosing pemetrexed over docetaxel decreases with increasing cost; however, patient preference remains strong at 0.70 in the UK and 0.85 in France with a cost per cycle of £400 and 2500€, respectively. **CONCLUSIONS:** NSCLC patients showed clear preference for the enhanced toxicity profile with pemetrexed, which translates to valuable quality of life gains in the second-line setting. These data provide sensitive strength of preference measures. Additional country studies are planned.

PCN32

INSTRUMENTS TO MEASURE PATIENT-REPORTED OUTCOMES AND PERCEPTIONS OF CANCER-RELATED FATIGUE: A REVIEW OF THE LITERATURE

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OBJECTIVES: To identify and describe currently available instruments to measure patient-reported outcomes and perceptions of cancer-related fatigue. **METHODS:** A literature review was performed in several electronic sources including the U.S. National Cancer Institute website and the Medline database (1966–2004) using the keywords: fatigue, asthenia, questionnaire, scale, instrument, oncology, cancer, assessment, measure, measurement, expectation/s, relief, satisfaction, perception/s, worry/ies. Articles located were hand-searched for further relevant articles. A citation was selected for review when it referred to the use or development of patient reported instrument(s) to measure the impact of cancer-related fatigue or its treatment and/or patients expectations, beliefs and concerns regarding cancer-related fatigue. For each questionnaire located the following data was reviewed: instruments' name, target population, item number, dimensions, response scale and time frame. **RESULTS:** In total, 35 citations were selected and reviewed, which referred to 30 different instruments (27 patient-reported outcome questionnaires –PRO's– and 3 epidemiological survey instruments) used to measure several aspects of cancer-related fatigue. Questionnaires ranged from a single item to 40 items, and the number of dimensions from 1 to 7. Almost all of the PRO's focused on aspects such as the intensity, frequency and duration of fatigue, though some also measured one or more of the following: quality of life, distress, psychological impact and impact on motivation/activity, and barriers to patient-physician communication. The survey instruments located were more likely to focus on patient's attitudes and beliefs regarding physician-patient interaction, psychosocial issues, accessing information, satisfaction with fatigue management and perceptions of causes, among others. **CONCLUSIONS:** Though there appears to be a surfeit of instruments to measure the intensity, frequency and duration of cancer-related fatigue, and some emphasis on the way fatigue affects quality of life there are few instruments which incorporate other aspects such as beliefs, expectations and attitudes which may also be useful in clinical practice.

PCN33

HEALTH UTILITY VALUES FOR CANCER RELATED ANAEMIA
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OBJECTIVES: To determine the preferences of the general public for health state descriptions of anaemia associated with cancer treatment. The majority of patients undergoing chemotherapy develop anaemia which leads to fatigue, and decreased quality of life (i.e. associated with a haemoglobin under 12g/dl). Treating cancer related fatigue has not been given the importance of